IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Confirmation No. 1067
Jonathan J. Hull et al.	Examiner: Manglesh M. Patel
Application No.: 10/001,891	Technology Center/Art Unit: 2178
Filed: November 19, 2001	APPELLANTS' BRIEF UNDER 37 CFR §41.37
For: PAPER-BASED INTERFACE FOR MULTIMEDIA INFORMATION STORED BY MULTIPLE MULTIMEDIA DOCUMENTS	

Mail Stop Appeal Brief
Commissioner for Patents
P.O. Box 1450
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Sir:

        Further to the Notice of Appeal mailed on April 5, 2008 for the above-referenced application, Appellants submit this Brief on Appeal.

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1. REAL PARTY IN INTEREST

All right, title, and interest in the subject invention and application are assigned to Ricoh Company, Ltd. of Tokyo, Japan. Therefore, Ricoh Company, Ltd. is the real party in interest.

2. RELATED APPEALS AND INTERFERENCES

None.

3. STATUS OF CLAIMS

Claims 1-28 are pending in the Application and stand finally rejected. The Appellants appeal the rejection of claims 1-28.

4. STATUS OF AMENDMENTS

No amendments are awaiting entry.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to techniques for accessing multimedia information stored in a plurality of multimedia documents. More particularly, to techniques for generating a printable representation of the multimedia information stored in the plurality of multimedia documents that can be printed on a paper medium to provide a paper-based interface for the multimedia information. (Application: Paragraph [09]).

Analyzing Multimedia Information from Multimedia Documents

In various embodiments, techniques are provided for an automated solution for generating a single printable representation that includes multimedia information extracted from a plurality of different multimedia documents or multimedia sources. The single printable representation includes multimedia information selected from the plurality of multimedia documents based upon selection criteria. The selection criteria may be based upon any attributes of the multimedia documents or their contents, or upon user-specified topics of interest, and the like. The single or consolidated printable representation can then be printed on a paper medium

to generate a consolidated paper document comprising information that satisfies the selection

criteria. (Application: Paragraph [15]).

In one computer-implemented embodiment, input identifying a selection criterion

is received. As discussed above, the selection criterion may be based on attributes of the

multimedia documents or their contents, or upon user-specified topics of interest. The

embodiment analyzes the multimedia information stored by a plurality of multimedia documents

to identify portions of multimedia information within the multimedia documents that satisfy the

selection criterion. The portions of multimedia information identified by the embodiment

include at least a first portion extracted from a first multimedia document from the plurality of

multimedia documents and a second portion extracted from a second multimedia document from

the plurality of multimedia documents. The portions of the multimedia information that satisfy

the selection criterion are then printed on a paper medium to generate the paper document

comprising a set of one or more printed pages.

For example, a user may specify that a single printable representation (or a single

multimedia paper document) be generated consolidating stories and articles related to "Middle

East Terrorism" from a plurality of news broadcast recordings. In response, the present

invention generates a single printable representation that includes multimedia information from

the plurality of news broadcast recordings related to "Middle East Terrorism." The single

consolidated printable representation may then be printed to generate a single consolidated

multimedia paper document that contains information related to "Middle East Terrorism" from

multiple multimedia documents. (Application: Paragraph [212]).

According to another example, topics of interest to the user (which may be stored

in a user profile) may be specified as the selection criteria. Based upon such a selection criteria,

a single printable representation may be generated that includes multimedia information from the

plurality of news broadcast recordings related to the user-specified topics of interest. The single

consolidated printable representation may then be printed to generate a single consolidated

multimedia paper document that contains information related to "Middle East Terrorism"

extracted from multiple multimedia documents. In this manner, multimedia information from

various multimedia sources or documents related to user-specified topics of interest may be

consolidated into a single printable representation that may then be printed to generate a multimedia paper document. The multimedia paper document generated in this manner is a valuable tool that enables the user to read and comprehend related information from multiple sources in a timely and efficient manner. (Application: Paragraph [213]).

FIG. 15 of the Application provides a simplified high-level flowchart depicting a method of generating a single printable representation that includes information extracted from a plurality of multimedia documents <u>by analyzing the multimedia information</u> stored by the plurality of multimedia documents according to an embodiment of the present invention. The processing depicted in FIG. 15, for example, may be performed by software modules executing on MIPSS 104 shown in FIG. 1 of the Application, by hardware modules coupled to MIPSS 104, or a combination thereof. The method is initiated by determining the selection criteria (or criterion) to be used for selecting the multimedia information to be included in the single printable representation and by determining the plurality of multimedia documents (or multimedia sources) from which the multimedia information is to be selected (step 1502).

For each multimedia document determined in step 1502, MIPSS 104, for example, divides the multimedia information contained by the multimedia document into segments of a particular time length (step 1504). The process of dividing a multimedia document into segments has been described earlier with respect to FIG. 6 of the Application. Accordingly, for each multimedia document identified in step 1502, MIPSS 104 then determines those segments or portions of the multimedia document that comprise information that satisfies the selection criteria identified in step 1502 (step 1506).

MIPSS 104 then generates a single consolidated printable representation based upon the segments determined in step 1506 (step 1508). The single consolidated printable representation includes segments determined in step 1506. The single printable representation generated in step 1508 may then be printed on a paper medium to generate a consolidated multimedia paper document (step 1510). The multimedia paper document generated in step 1510 comprises information selected from the plurality of multimedia documents based upon the selection criteria. The multimedia paper document generated in step 1510 may comprise annotations identifying printed information that satisfies the selection criteria.

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FIGS. 16A, 16B, 16C, and 16D of the Application depict pages of a multimedia paper document generated according to an embodiment of the present invention using the method depicted in FIG. 14. The pages have been selected from a plurality of multimedia documents because they contain information related to the topic of interest "Middle East Terrorism" that was specified as the selection criteria. The pages have been selected from printable representations generated for a plurality of multimedia documents. For example, pages 1600 and 1602 depicted in FIGS. 16A and 16B have been selected from a printable representation generated for a "CNN News Site (Channel 203)" recording that was recorded on May 30, 2001 starting at 12:59PM and is of length 56:40 minutes, page 1606 depicted in FIG. 16C has been selected from a printable representation generated for a "Newshour (PBS, Channel 233)" recording that was recorded on June 5, 2001 starting at 6:01PM and is of length 54:49 minutes, page 1604 depicted in FIG. 16D has been selected from a printable representation generated for a "Hardball (CNBC, Channel 356)" recording that was recorded on September 14, 2001 starting at 5:00PM and is of length 59:59 minutes. For each page, information related to "Middle East Terrorism" has been annotated. This enhances the readability of the multimedia paper document. Accordingly, information related to "Middle East Terrorism" from a plurality of multimedia documents is consolidated into one document.

As described above, a user may generate a "customized" multimedia paper document by specifying appropriate selection criteria. In this manner, the user can quickly extract relevant information from multiple hours of multimedia broadcasts by simply reading the customized multimedia paper document. The present invention thus reduces the time spent by the user in locating and retrieving relevant information from multiple multimedia information sources or recordings. (Applications: Paragraph [223]).

Analyzing Printable Representations of Multimedia Information
In further computer-implemented embodiments, input identifying a selection criterion is received and printable representations are accessed for a first multimedia document and a second multimedia document. The printable representation for the first multimedia document is analyzed to identify at least one portion of the printable representation that satisfies

the selection criterion. <u>The printable representation</u> for the second multimedia document <u>is also</u>

<u>analyzed</u> to identify at least one portion of the printable representation that satisfies the selection

criterion. A consolidated printable representation is then generated that includes the at least one

portion of the printable representation for the first multimedia document and the at least one

portion for the second multimedia document that satisfy the selection criterion. The consolidated

printable representation is then printed on a paper medium to generate the paper document

comprising one or more printed pages. (Application: Paragraph [17]).

FIG. 14 of the Application provides a simplified high-level flowchart depicting a

method of generating a single printable representation according to an embodiment of the present

invention that includes multimedia information selected from a plurality of multimedia

documents <u>by analyzing the printable representations</u> of the plurality of multimedia documents.

The method is initiated by determining the selection criteria (or criterion) to be

used for selecting the multimedia information to be included in the single printable

representation and by determining the plurality of multimedia documents (or multimedia

sources) from which the multimedia information is to be selected or extracted (step 1402).

MIPSS 104 of FIG. 1, for example, then generates a printable representation for each multimedia

document determined in step 1402 if a printable representation does not already exist for the

multimedia document (step 1404). The printable representations for the multimedia documents

may be generated according to the methods depicted in FIGS. 4 and 6.

For each multimedia document identified in step 1402, MIPSS 104 searches the

pages from the printable representation of the multimedia document to identify a set of pages

that comprise information that satisfies the selection criteria determined in step 1402 (step 1406).

MIPSS 104 then generates a single consolidated printable representation that includes the pages

determined in step 1406 (step 1408). The single printable representation generated in step 1408

may then be printed on a paper medium to generate a consolidated multimedia paper document

(step 1410). The multimedia paper document generated in step 1410 comprises information

selected from the plurality of multimedia documents based upon the selection criteria. For each

page of the multimedia paper document generated in step 1410, information printed information

that satisfies the selection criteria may be annotated.

As described above, <u>the printable representations of the multimedia documents</u> <u>are analyzed</u> to identify portions of multimedia information from the various multimedia documents to be included in the consolidated printable representation. Accordingly, in several embodiments of the present invention, <u>multimedia information stored by the multimedia</u> <u>documents may be analyzed</u> and/or <u>printable representations of the multimedia documents may</u> <u>be analyzed</u> to identify portions of the multimedia information that satisfy selection criteria. A consolidated printable representation may then be generated to include portions of multimedia information from the various multimedia documents that satisfy the selection criteria. The consolidated printable representation may then be printed on a paper medium to generate a consolidated or "customized" multimedia paper document. (Application: Paragraph [217]).

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1.   Whether claims 1-28 are obvious under 35 U.S.C. §103(a) over U.S. Patent No. 5,713,021 to Kondo et al. (hereinafter "Kondo"), in view of U.S. Patent No. 7,075,671 to Kavensky et al. (hereinafter "Kavensky").

7. ARGUMENT

To reach a proper determination under 35 U.S.C. § 103(a), the Examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. (M.P.E.P. § 2142).

The Supreme Court in <u>KSR International Co. v. Teleflex Inc. (KSR)</u>, 550 U.S. ___, 82 USPQ2d 1385 (2007) reaffirmed the familiar framework for determining obviousness as set forth in <u>Graham v. John Deere Co.</u>, 383 U.S. 1, 148 USPQ 459 (1966). The factual inquiries enunciated by the Court are as follows:

(A) Determining the Scope and Content of the Prior Art;

(B) Ascertaining the differences between the claimed invention and the prior art; and

(C) Resolving the level of ordinary skill in the pertinent art.

The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. § 103(a) should be made explicit.

Appellants respectfully submit that claims 1-28 are allowable, and that the subject matter "as a whole" recited in claims 1-28 is not obvious under 35 U.S.C. §103(a) over U.S. Patent No. 5,713,021 to Kondo et al. (hereinafter "Kondo"), in view of U.S. Patent No. 7,075,671 to Kavensky et al. (hereinafter "Kavensky").

A.   Claims 1-5, 11-17, and 23-25 "as a whole" would not have been obvious to one of ordinary skill in the art at the time of invention.

As discussed above, in various embodiments, multimedia information stored in a plurality of multimedia documents or provided from a plurality of multimedia sources is analyzed to identify portions of the multimedia information that satisfies selection criteria. Claim 1, for example, recites the feature of "analyzing the multimedia information stored by the plurality of multimedia documents in response to the input to identify portions of multimedia information that satisfy the selection criterion, the identified portions of multimedia information including at least a first portion extracted from a first multimedia document from the plurality of multimedia documents and a second portion extracted from a second multimedia document from the plurality of multimedia documents." (Emphasis added).

In rejecting claim 1, the Examiner alleges that Kondo and Kavensky, either individually or in combination, discloses the above recited feature of claim 1. Appellants respectfully disagree.

Kondo is directed to a multimedia database system that "searches for a portion of multimedia information using view objects corresponding to the portion of multimedia data." (Kondo: Col. 1, lines 13-15). Therefore, Kondo attempts to provide "a database search system" that facilitates searching multimedia data "using a variety of search patterns depending on the user's viewpoint." (Kondo: Col. 1, lines 56-59). Thus, Kondo discloses a multimedia data

search system that includes a "storage unit for storing features of a portion of data and data identifying the portion of data" and "a search unit for searching view objects stored in the storage unit according to a feature of the portion of data." (Kondo: Abstract, lines 1-5). As can be seen in FIG. 2 of Kondo, multimedia data is stored separately from view objects or "features" that correspond to the multimedia data. (See FIG. 2 of Kondo separating multimedia data in the multimedia data storage part 11 from view objects or "features" in the view object storage part 12). Kondo discloses that the search unit searches to the view objects stored in the storage unit according to a feature of the portion of data. (Kondo: Abstract). Accordingly, the search system in Kondo relies on searching the view objects to identify multimedia information.

FIGS. 5-8 of Kondo illustrate examples of view objects. For example, in FIG. 5, the view object identifies the type of multimedia data that it references (e.g., text), where its located (e.g., file name), and what portion is relevant to a given keyword. Each view object includes a display() method that can be invoked to display the identified type of multimedia information to a user. Thus, if user input matches the keyword, the display() method may be invoked with specific parameters to display the multimedia information from the given file and at the specified portion.

In contrast, claim 1 recites analyzing the actual multimedia information in response to input to identify portions of the multimedia information that satisfy a selection criterion. Claim 1 recites a significant departure from the database search system of Kondo. For example, continuing the example above of a user specifying that a single printable representation (or a single multimedia paper document) be generated consolidating stories and articles related to "Middle East Terrorism," the actual multimedia information is analyzed based on the "Middle East Terrorism" criteria. For example, the actual audio information in a plurality of multimedia documents can be analyzed to extract textual information to identify portions that match the terms "middle and east and terrorism." (Application: Paragraph [140]). In another example, the actual videos in the plurality of multimedia documents may be analyzed using optical character recognition (OCR) to detect whether visual headlines relate to the topic of interest. (Application: Paragraph [143]). Accordingly, claim 1 recited that the actual multimedia information is analyzed to identify portions that satisfy selection criteria.

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Kondo does not disclose analyzing multimedia information stored in a plurality of multimedia documents in response to selection criteria as recited in claim 1, for example, because when a user performs a search using the system of Kondo, the search unit searches the view objects. (Kondo: FIG. 12, S6). Kondo merely determines whether any view objects match keywords in the input of the user. (Kondo: FIG. 5, see keyword of view object). Accordingly, this is one significant difference between the method recited in claim 1 and the database search system of Kondo. Kondo relies on searching a database of metadata and fails to disclose that the actual multimedia information is searched based on the input received specifying a selection criterion as recited in claim 1.

Accordingly, the feature of "analyzing the multimedia information stored by the plurality of multimedia documents in response to the input to identify portions of multimedia information that satisfy the selection criterion" as recited in claim 1 is a substantially different and departure from the database system in Kondo that is reliant on its database of view objects that explicitly identify which portions of multimedia information are associated with specific keywords. Kavensky also fails to disclose the above feature recited in claim 1, and thus fails to cure the above deficiencies of Kondo. Therefore, the Examiner has fail to establish where all claim elements where known in the cited references or in the common knowledge of skilled artisans at the time of invention. This difference, along with other differences, establish that "as a whole" the subject matter of claim 1 would not have been obvious to one of ordinary skill in the art in view of Kondo and Kavensky.

Appellants respectfully submit that claims 1-5, 11-17, and 23-25 "as a whole" would not have been obvious to one of ordinary skill in the art at the time of invention for at least the reasons given above.

B.   Claims 6-10, 18-22, and 26-28 "as a whole" would not have been obvious to one of ordinary skill in the art at the time of invention.

As discussed above, in various embodiments, printable representations of multimedia information stored in a plurality of multimedia documents or provided from a plurality of multimedia sources are analyzed to identify portions of the printable representations

that satisfy selection criteria. Claim 6, for example, recites the features of "analyzing the printable representation for the first multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion" and "analyzing the printable representation for the second multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion."

In rejecting claim 6, the Examiner alleges that Kondo and Kavensky, either individually or in combination, discloses the above recited feature of claim 6. Appellants respectfully disagree.

In rejection claim 6, the Examiner fails to identify where Kondo and Kavensky, either individually or in combination, disclose the above features recited in claim 6. The Examiner states that Kondo explicitly fails to teach the printing of the portions of multimedia information. Thus, logically the system of Kondo does not search printable representations of multimedia information as recited in claim 6.

The Examiner then further alleges that Kavensky disclose the above features in the Abstract and Col. 5, lines 55-67. Kavensky is directed to providing a printing capability using a peripheral or stand-alone device. In Col. 5, lines 55-67, Kavensky discloses that video and transcribed text may be input to MIM 230 for output to a fax machine. Kavensky suggest that options may be made available to the user, such as cropping, where the user choose one section of the video signal to print.

However, Kavensky fails to disclose that the printable representations are analyzed as recited in claim 6 in response to input to identify portions of the printable representations that satisfy selection criteria specified by the input.

Accordingly, the features of "analyzing the printable representation for the first multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion" and "analyzing the printable representation for the second multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion" as recited in claim 6 are substantially different and a departure from the database system in Kondo that is reliant on its

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database of view objects that explicitly identify which portions of multimedia information are associated with specific keywords and the mere printing capability of Kavensky. Therefore, the Examiner has fail to establish where all claim elements where known in the cited references or in the common knowledge of skilled artisans at the time of invention. This difference, along with other differences, establish that "as a whole" the subject matter of claim 6 would not have been obvious to one of ordinary skill in the art in view of Kondo and Kavensky.

Appellants respectfully submit that claims 6-10, 18-22, and 26-28 "as a whole" would not have been obvious to one of ordinary skill in the art at the time of invention for at least the reasons given above.

C. Clear error by the Examiner

Office personnel fulfill the critical role of factfinder when resolving the Graham inquiries. It must be remembered that while the ultimate determination of obviousness is a legal conclusion, the underlying Graham inquiries are factual. When making an obviousness rejection, Office personnel must therefore ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. In certain circumstances, it may also be important to include explicit findings as to how a person of ordinary skill would have understood prior art teachings, or what a person of ordinary skill would have known or could have done. Factual findings made by Office personnel are the necessary underpinnings to establish obviousness.

In the Final Office Action dated January 25, 2008, the Examiner attempts to respond to Appellants discussion of these same difference in the following manner.

On page 10, the Examiner states that the claim describes that the multimedia information is analyzed "in response to the input that satisfy the selection criteria. This is incorrect, as claim 1 recites "receiving input identifying a selection criterion" and "analyzing the multimedia information stored by the plurality of multimedia documents in response to the input to identify portions of multimedia information that satisfy the selection criterion." The Examiner appears not to have adequately ascertained the differences between the claimed invention and the prior art which requires interpreting the claim language.

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The Examiner continues on page 10 to state that the "selection criteria is defined in applicant's specification as follows: 'The selection criteria may be based on any attributes of the multimedia documents or its contents, or upon user specified topics of interest, and the like.'" The Examiner then alleges that the "searched view objects [of Kondo] are attributes of the multimedia documents." The Examiner continues on page 11 by alleging that the "fact that they [the view objects of Kondo] are searched is a criterion used to determine which portion of multimedia is return."

The Examiner further appears not to have adequately determined the scope and content of the prior art because the fact that an object has been searched in Kondo does not result in the return of multimedia information in Kondo. More correctly, the fact that the keyword portion of a searched view object matches user input is what results in the return of the multimedia information. The fact may exists that a view object was searched, but no data returned because of an insufficient match. Additionally, what the Examiner is proposing that there is no difference between searching for keywords in metadata as in Kondo and actually analyzing multimedia information or printable representations to identify portions that have the attributes or that correspond to a topic of interest as recited in the claims.

Moreover, on page 11, the Examiner then states that "[o]nce the attributes or view objects based on the users search or criteria is met then the multimedia information is analyzed, analyzed because that information is retrieved via display() and Play() methods." Appellant respectfully submit that the mere retrieval of data cannot be understood to involve the analysis as recited in the claims.

For example, in Kondo, the display and Play() methods are only invoked from a view object _after_ any identification process has occurred. For example, the display() method of a view object may be invoked after the view object has been identified to match a keyword. Thus, the order of processing by the Examiner's reasoning identification _is followed_ by analysis (i.e., the display() and Play() methods). In contrast, claim 1 recites that the actual multimedia information is analyzed to identify portions that satisfy the selection criteria. Thus, different from the Examiner's reasoning, the identification of claim 1 _is preceded_ by analysis.

Thus, one of ordinary skill in the art would not understand the display() and Play() methods of Kondo to involve the same analysis of multimedia information or printable representations as recited in the claims to identify portions that satisfy selection criteria.

8. CONCLUSION

For these reasons, it is respectfully submitted that the rejection should be reversed.

Respectfully submitted,

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9. CLAIMS APPENDIX

1. (Previously Presented) A computer-implemented method of generating a paper document based upon a plurality of multimedia documents storing multimedia information in electronic form, the method comprising:

receiving input identifying a selection criterion;

analyzing the multimedia information stored by the plurality of multimedia documents in response to the input to identify portions of multimedia information that satisfy the selection criterion, the identified portions of multimedia information including at least a first portion extracted from a first multimedia document from the plurality of multimedia documents and a second portion extracted from a second multimedia document from the plurality of multimedia documents; and

printing the portions of the multimedia information that satisfy the selection criterion, including the extracted first portion and the extracted second portion, on a paper medium to generate the paper document comprising a set of one or more printed pages.

2. (Original) The method of claim 1 wherein printing the portions of the multimedia information that satisfy the selection criterion on the paper medium to generate the paper document comprises:

printing text information on at least one page of the set of printed pages of the paper document such that words in the text information that satisfy the selection criterion are annotated, wherein the text information is extracted from the portions of the multimedia information.

3. (Original) The method of claim 1 wherein printing the portions of the multimedia information that satisfy the selection criterion on the paper medium to generate the paper document comprises:

printing one or more video frames on at least one page of the set of printed pages of the paper document such that at least one video frame that satisfies the selection criterion is

annotated, wherein the one or more video frames are extracted from the portions of the multimedia information.

4. (Original) The method of claim 1 wherein receiving input identifying the selection criterion comprises:

receiving information identifying a topic of interest.

5. (Original) The method of claim 1 wherein printing the portions of the multimedia information that satisfy the selection criterion on the paper medium to generate the paper document comprises:

generating a printable representation for the portions of the multimedia information that satisfy the selection criterion; and

printing the printable representation on the paper medium to generate the paper document.

6. (Previously Presented) A method of generating a paper document using multimedia information stored by a first multimedia document and a second multimedia document, the method comprising:

receiving input identifying a selection criterion;

accessing printable representations for the first multimedia document and the second multimedia document;

analyzing the printable representation for the first multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion;

analyzing the printable representation for the second multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion;

generating a consolidated printable representation that includes the at least one portion of the printable representation for the first multimedia document and the at least one portion for the second multimedia document that satisfy the selection criterion; and

printing the consolidated printable representation on a paper medium to generate the paper document comprising one or more printed pages.

7. (Original) The method of claim 6 wherein:

analyzing the printable representation for the first multimedia document comprises determining at least one page in the printable representation for the first multimedia document that comprises information that satisfies the selection criterion;

analyzing the printable representation for the second multimedia document comprises determining at least one page in the printable representation for the second multimedia document that comprises information that satisfies the selection criterion; and

generating the consolidated printable representation comprises including the at least one page from the printable representation for the first multimedia document and the at least one page from the printable representation for the second multimedia document in the consolidated printable representation.

8. (Original) The method of claim 6 wherein printing the consolidated printable representation on the paper medium to generate the paper document comprises:

printing text information on at least one page of the one or more printed pages of the paper document such that words in the text information that satisfy the selection criterion are annotated.

9. (Original) The method of claim 6 wherein printing the consolidated printable representation on the paper medium to generate the paper document comprises:

printing one or more video frames on at least one page of the one or more printed pages of the paper document such that at least one video frame of the one or more video frames that satisfies the selection criterion is annotated.

10. (Original) The method of claim 6 wherein receiving input identifying the selection criterion comprises:

receiving information identifying a topic of interest.

11. (Previously Presented) A paper document that comprises:

one or more pages, wherein at least one page of the one or more pages is imprinted with text information that is extracted from multimedia information stored by a plurality of multimedia documents if the text information satisfies a selection criterion, the multimedia information analyzed in response input that identifies the selection criterion, and wherein the at least one page is imprinted with one or more video frames corresponding to the text information extracted from the plurality of multimedia documents.

12. (Original) The paper document recited in claim 11, wherein the text information is extracted from closed-caption text information or audio information included in the multimedia information stored by the plurality of multimedia documents and the one or more video frames are extracted from video information included in the multimedia information stored by the plurality of documents.

13. (Previously Presented) A system for generating a paper document based upon a plurality of multimedia documents storing multimedia information in electronic form, the system comprising:

an input module configured to receive input identifying a selection criterion;

a processing module configured to analyze the multimedia information stored by the plurality of multimedia documents in response to the input to identify portions of multimedia information that satisfy the selection criterion, the identified portions of multimedia information including at least a first portion extracted from a first multimedia document from the plurality of multimedia documents and a second portion extracted from a second multimedia document from the plurality of multimedia documents; and

an output module configured to print the portions of the multimedia information that satisfy the selection criterion, included the extracted first portion and the extracted second portion, on a paper medium to generate the paper document comprising a set of one or more printed pages.

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14. (Original) The system of claim 13 wherein the output module is configured to print text information on at least one page of the set of printed pages of the paper document such that words in the text information that satisfy the selection criterion are annotated, wherein the text information is extracted from the portions of the multimedia information.

15. (Original) The system of claim 13 wherein output module is configured to print a one or more video frames on at least one page of the set of printed pages of the paper document such at least one video frame that satisfies the selection criterion is annotated, wherein the one or more video frames are extracted from the portions of the multimedia information.

16. (Original) The system of claim 13 wherein the input identifying the selection criterion received by the input module includes information identifying a topic of interest.

17. (Original) The system of claim 13 wherein:

the processing module is configured to generate a printable representation for the portions of the multimedia information that satisfy the selection criterion; and

the output module is configured to print the printable representation on the paper medium to generate the paper document.

18. (Previously Presented) A system for generating a paper document using multimedia information stored by a plurality of multimedia documents, the system comprising:

an input module configured to receive input identifying a selection criterion;

a processing module configured to:

access printable representations for the first multimedia document and the second multimedia document;

analyze the printable representation for the first multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion;

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analyze the printable representation for the second multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion; and

generate a consolidated printable representation that includes the at least one portion of the printable representation for the first multimedia document and the at least one portion for the second multimedia document that satisfy the selection criterion; and

an output module configured to print the consolidated printable representation on a paper medium to generate the paper document comprising one or more printed pages.

19. (Original) The system of claim 18 wherein the processing module is configured to:

determine at least one page in the printable representation for the first multimedia document that comprises information that satisfies the selection criterion;

determine at least one page in the printable representation for the second multimedia document that comprises information that satisfies the selection criterion; and

include the at least one page from the printable representation for the first multimedia document and the at least one page from the printable representation for the second multimedia document in the consolidated printable representation.

20. (Original) The system of claim 18 wherein the output module is configured to print text information on at least one page of the one or more printed pages of the paper document such that words in the text information that satisfy the selection criterion are annotated.

21. (Original) The system of claim 18 wherein the output module is configured to print one or more video frames on at least one page of the one or more printed pages of the paper document such that at least one video frame of the one or more video frames that satisfies the selection criterion is annotated.

22. (Original) The system of claim 18 wherein the input identifying the selection criterion received by the input module includes information identifying a topic of interest.

23. (Previously Presented) A computer program product stored on a computer readable storage medium for generating a paper document based upon a plurality of multimedia documents storing multimedia information in electronic form, the computer program product comprising:

code for receiving input identifying a selection criterion;

code for analyzing the multimedia information stored by the plurality of multimedia documents in response to the input to identify portions of multimedia information that satisfy the selection criterion, the identified portions of multimedia information including at least a first portion extracted from a first multimedia document from the plurality of multimedia documents and a second portion extracted from a second multimedia document from the plurality of multimedia documents; and

code for printing the portions of the multimedia information that satisfy the selection criterion, including the extracted first portion and the extracted second portion, on a paper medium to generate the paper document comprising a set of one or more printed pages.

24. (Original) The computer program product of claim 23 wherein the code for printing the portions of the multimedia information that satisfy the selection criterion on the paper medium to generate the paper document comprises:

code for printing text information on at least one page of the set of printed pages of the paper document such that words in the text information that satisfy the selection criterion are annotated, wherein the text information is extracted from the portions of the multimedia information; and

code for printing one or more video frames on the at least one page such that at least one video frame that satisfies the selection criterion is annotated, wherein the one or more video frames are extracted from the portions of the multimedia information.

25. (Original) The computer program product of claim 23 wherein the code for printing the portions of the multimedia information that satisfy the selection criterion on the paper medium to generate the paper document comprises:

code for generating a printable representation for the portions of the multimedia information that satisfy the selection criterion; and

code for printing the printable representation on the paper medium to generate the paper document.

26. (Previously Presented) A computer program product stored on a computer readable storage medium for generating a paper document using multimedia information stored by a plurality of multimedia documents, the computer program product comprising:

code for receiving input identifying a selection criterion;

code for accessing printable representations for the first multimedia document and the second multimedia document;

code for analyzing the printable representation for the first multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion;

code for analyzing the printable representation for the second multimedia document in response to the input to identify at least one portion of the printable representation that satisfies the selection criterion;

code for generating a consolidated printable representation that includes the at least one portion of the printable representation for the first multimedia document and the at least one portion for the second multimedia document that satisfy the selection criterion; and

code for printing the consolidated printable representation on a paper medium to generate the paper document comprising one or more printed pages.

27. (Original) The computer program product of claim 26 wherein:

code for analyzing the printable representation for the first multimedia document comprises determining at least one page in the printable representation for the first multimedia document that comprises information that satisfies the selection criterion;

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code for analyzing the printable representation for the second multimedia document comprises determining at least one page in the printable representation for the second multimedia document that comprises information that satisfies the selection criterion; and

code for generating the consolidated printable representation comprises including the at least one page from the printable representation for the first multimedia document and the at least one page from the printable representation for the second multimedia document in the consolidated printable representation.

28. (Original) The computer program product of claim 26 wherein the code for printing the consolidated printable representation on the paper medium to generate the paper document comprises:

code for printing text information on at least one page of the one or more printed pages of the paper document such that words in the text information that satisfy the selection criterion are annotated; and

code for printing one or more video frames on at least one page of the one or more printed pages of the paper document such that at least one video frame of the one or more video frames that satisfies the selection criterion is annotated.

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10. EVIDENCE APPENDIX

None.

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11. RELATED PROCEEDINGS APPENDIX

None.